

Work Order ID 131330

131330

Page 1

Thursday, April 02, 2015 11:53:54 AM

Item ID: D5134-042 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Damper Support Assembly, RH
 Start Date: 4/2/2015 Start Qty: 8.00 ***8*** Cust Item ID:
 Required Date: 4/2/2015 Req'd Qty: 8.00 ***8*** Customer:
 Reference:

Approvals: Process Plan: MLJ Date: 1504-02 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D5134	A								

100 0.00
100
 Bandsaw Memo 0.00
 Jeaspa Bandsaw CUT BLANK TO 5.125" LONG
 8 8 DAS 44 15/04/22
 9-89

110 0.00
110
 HAAS 1 Memo 0.00
 HAAS CNC vertical machine #1 Mill as per Dwg and folio FB342
 DWG REV: A
 FOLIO REV: AA
 DEBURR
 8 8 DAS 44 15/04/25
 9-89

P.T.O.

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER :					

131330

Page 2

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 4/2/2015 **Start Qty:** 8.00 ***g***

Cust Item ID:

Required Date: 4/2/2015 **Req'd Qty:** 8.00 ***O***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*

Stop *NR2*

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">Skid-tube ☐</td> <td style="width: 15%;">Cross tube ☐</td> <td style="width: 15%;">Water Jet ☐</td> <td style="width: 15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
								Lead hand / Supervisor Approval Verification																	
										QC / QA Coordinator Approval															
Root Cause		FAULT CATEGORY																							
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Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐																				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐																				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐																				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐																				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐																				
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Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐																				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐																				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐																				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____																							
Misidentified ☐	Past Due ☐																								

Work Order ID 131330

Thursday, April 02, 2015 11:53:54 AM

131330

Page 4

Item ID: D5134-042

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Damper Support Assembly, RH

Start Date: 4/2/2015 Start Qty: 8.00

8

Cust Item ID:

Required Date: 4/2/2015 Req'd Qty: 8.00

8

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool # Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

0.00

160

Small Fab

Memo

0.00

Small Fab

install bushings as per dwg

8

FF

JUL 07 2015

170

QC5- Inspect part completeness to step on W/O

0.00

170

QC

Memo

0.00

Quality Control

8

DAS
27
9-89DAS
38
9-89

JUL 07 2015

Location: LG054

8

J.A

JUL 07 2015

180

0.00

180

Small Fab

Memo

0.00

Small Fab

8

FF

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
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Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						

Work Order ID 131330

Thursday, April 02, 2015 11:53:54 AM

131330

Page 5

Item ID: D5134-042 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Damper Support Assembly, RH
Start Date: 4/2/2015 Start Qty: 8.00 ***8*** Cust Item ID:
Required Date: 4/2/2015 Req'd Qty: 8.00 ***8*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC21- Final Inspection - Work Order Release	0.00							
190									
QC	Memo	0.00							
Quality Control									

MLJ JUL 07 2015

MLJ JUL 07 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Şurge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

Thursday, April 02, 2015 11:53:56 AM

Page 1

Work Order ID: 131330

131330

Parent Item: D5134-042

D5134-042

Parent Item Name: Damper Support Assembly, RH

Start Date: 4/2/2015

Required Date: 4/2/2015

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP REV:A NEW ISSUE 14-09-09 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M7075T6B3.000x04.00
0

Purchased

No

f

0.0000

4

DAS
44
9-89

M7075T6B3 000x04 000

131 225 → 3.44'

**

15/04/22

7075-T6 BAR 3.000' X 4.000" Grain along 3"

NAS77C6-021

Purchased

No

Each

38.0000

16

Could not pull mat'l's

NAS77C6-021

**

FF

BUSHING

JUL 07 2015

Location

132632

Loc Qty

Loc Code

ST260

130278*

38

M131470

38

132285

6

4

6

*
could not pull all bushings

DQA: _____ Date: _____



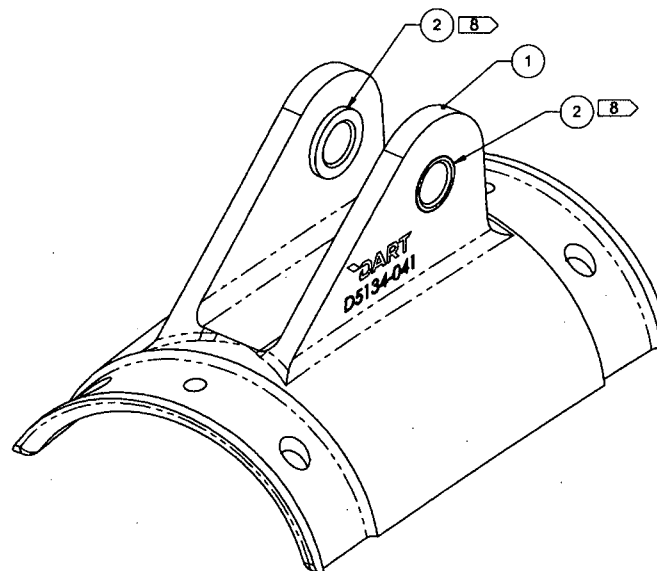
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabelled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER :					

ITEM	QTY	P/N	DESCRIPTION
	X	D5134-041	DAMPER BRACKET ASSY, LH
1	1	D5134-1	DAMPER SUPPORT, LH
2	2	NAS77C6-021	BUSHING



D5134-041 DAMPER SUPPORT ASSY, LH

131330 MLW
1504-02

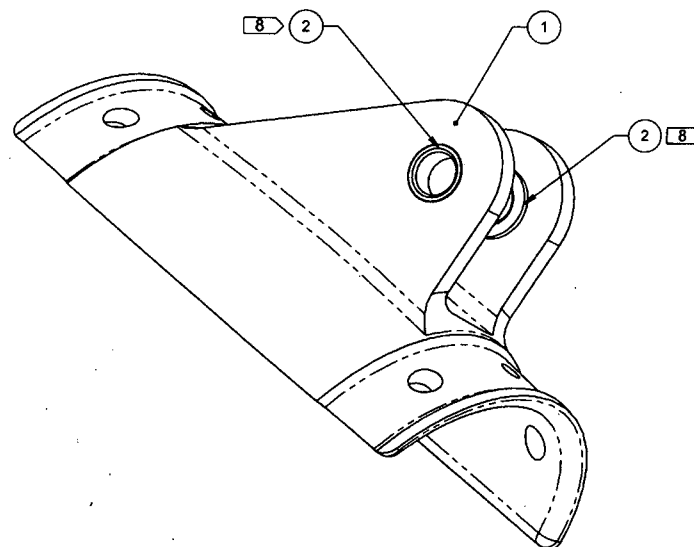
RELEASED
2014-10-08
MP

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: PRIME AND PAINT WHITE PER DART QSI 005 4.2
MASK OFF INNER SURFACE OF BUSHING PRIOR TO APPLICATION OF PRIME/PAINT
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.41 lbs
- 8) NAS77C6-021 BUSHINGS ARE PRESS FIT INTO D5134-1 DAMPER SUPPORT, IN ORIENTATION SHOWN

A		NEW ISSUE		AP	14.09.02
REV.	DESCRIPTION			BY	DATE
DESIGN	AP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		REV. A	
DRAWN	AP			SHEET 1 OF 4	
CHECKED	ML			DRAWING NO. D5134	
MFG. APPR.	RQ			TITLE DAMPER SUPPORT ASSY	
APPROVED	MP	DATE 14.09.02		SCALE NTS	
DE APPR.	DS	COPYRIGHT © 2014 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL. AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

ITEM	QTY	P/N	DESCRIPTION
	X	D5134-042	DAMPER SUPPORT ASSY, RH
1	1	D5134-2	DAMPER SUPPORT, RH
2	2	NAS77C6-021	BUSHING



D5134-042 DAMPER SUPPORT ASSY, RH

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: PRIME AND PAINT WHITE PER DART QSI 005 4.2
MASK OFF INNER SURFACE OF BUSHING PRIOR TO APPLICATION OF PRIME/PAINT
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.42 lbs
- 8) NAS77C6-021 BUSHINGS ARE PRESS FIT INTO D5134-2 DAMPER SUPPORT, IN ORIENTATION SHOWN

APPROVED

DESIGN	AP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AP		
CHECKED	ML	DRAWING NO.	REV. A
MFG. APPR.	RQ	D5134	SHEET 2 OF 4
APPROVED	MP	TITLE	SCALE
DE APPR.	DS	DAMPER SUPPORT ASSY	NTS
DATE	14.09.02	COPYRIGHT © 2014 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

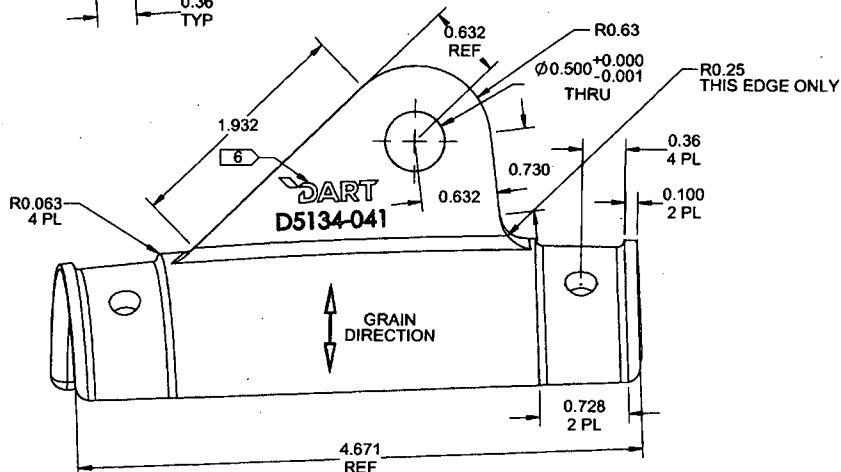
RELEASED
2014-10-08
mo

9 Ø0.188 TOOLING HOLE
AS REQUIRED, 2 PL

9 Ø0.257 TOOLING HOLE
AS REQUIRED, 4 PL

0.893
REF

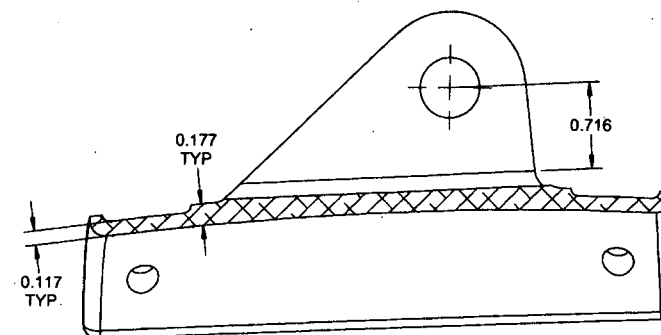
0.36
TYP



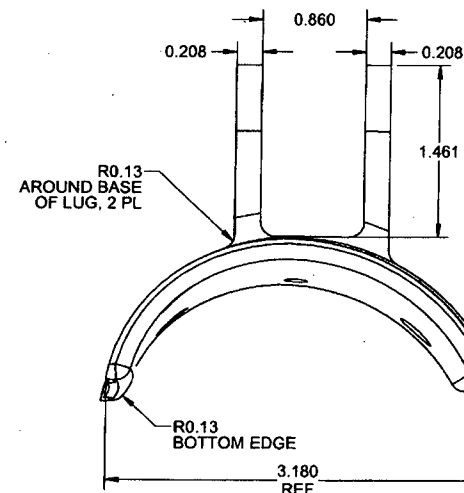
D5134-1 DAMPER SUPPORT, LH

NOTES:

- 1) MATERIAL: ALUMINUM 7075-T6 (OR T651 / T6510 / T6511 / T62) ALUMINUM BAR
PER AMS-QQ-A-225/9 (OR AMS 4122 / 4123 / 4186 / 4187) OR
PER AMS-QQ-A-200/11, REF DART SPEC M7075T6B
- 2) FINISH: CHEMICAL CONVERSION COAT PER QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART LOGO AND P/N "D5134-041" IN AREA SHOWN
USING 0.125 HIGH X 0.010-0.020 DEEP LETTERING PER DART QSI 044 6.3,
IDENTIFY WITH DART B/N PER DART QSI 044 6.1
- 7) WEIGHT: 0.38 lbs
- 8) ALL NON-DIMENSIONED FEATURES DEFINED PER DRAWING FILE "D5134-1-REVA.SLDPRT"
- 9) POSITION TOOLING HOLES AS REQUIRED WHILE MAINTAINING MINIMUM 2D EDGE DISTANCE AND 4D PITCH BETWEEN HOLES



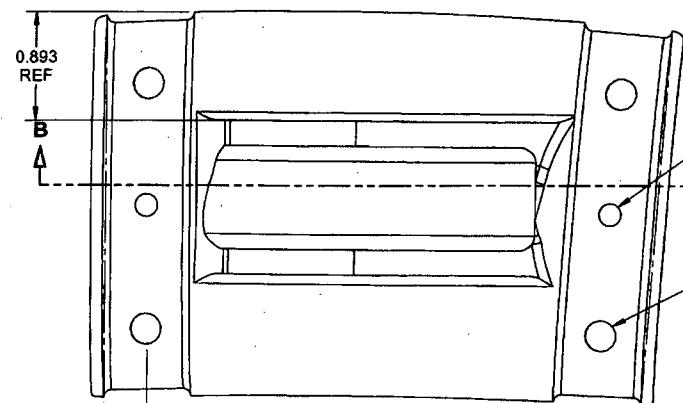
SECTION A-A



RELEASED
2014-10-08

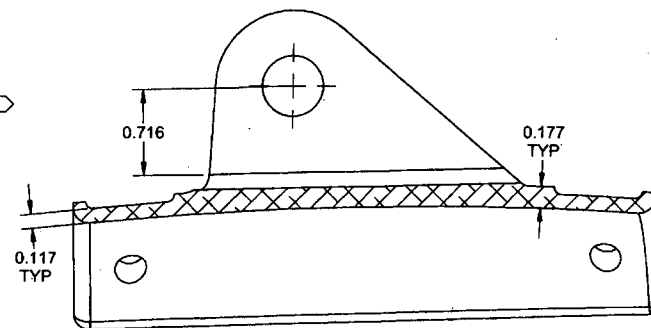
APPROVED

DESIGN	AP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AP		
CHECKED	ML	DRAWING NO.	REV. A
MFG. APPR.	RQ	D5134	SHEET 3 OF 4
APPROVED	MP	TITLE	SCALE
DE APPR.	DS	DAMPER SUPPORT ASSY	NTS
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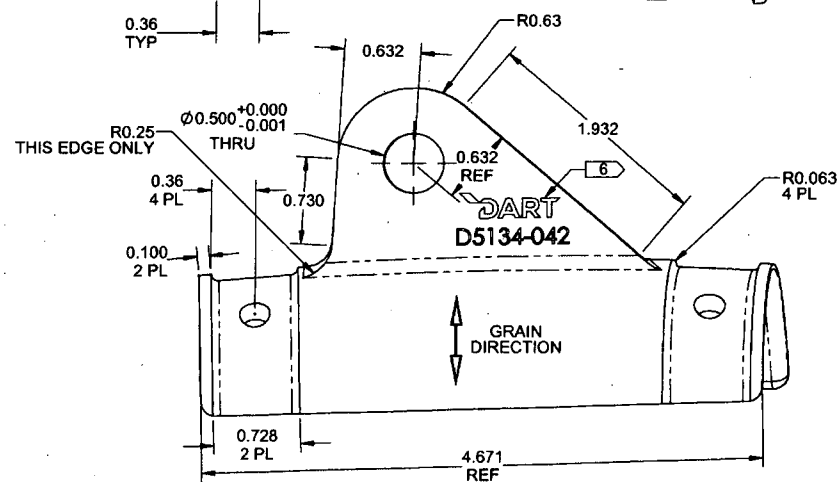


Ø0.188 TOOLING HOLE
AS REQUIRED, 2PL

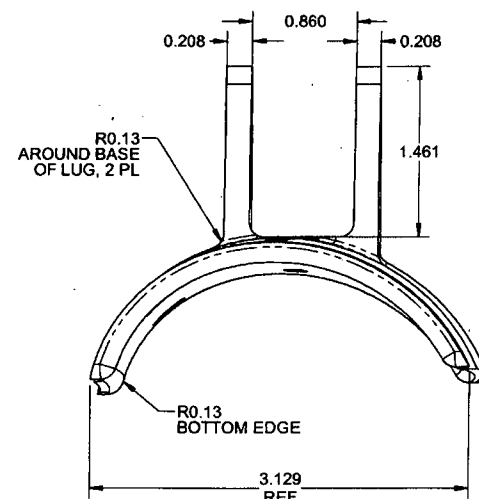
Ø0.257 TOOLING HOLE
AS REQUIRED, 4PL



SECTION B-B



D5134-2 DAMPER SUPPORT, RH



- NOTES:**
- 1) MATERIAL: ALUMINUM 7075-T6 (OR T651 / T6510 / T6511 / T62) ALUMINUM BAR
PER AMS-QQ-A-225/9 (OR AMS 4122 / 4123 / 4188 / 4187) OR
PER AMS-QQ-A-200/1, REF DART SPEC M7075T6B
 - 2) FINISH: CHEMICAL CONVERSION COAT PER QSI 005 4.1
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: N/A
 - 6) IDENTIFICATION: IDENTIFY WITH DART LOGO AND P/N "D5134-042" IN AREA SHOWN
USING 0.125 HIGH X 0.010-0.020 DEEP LETTERING PER DART QSI 044 6.3,
IDENTIFY WITH DART B/N PER DART QSI 044 6.1
 - 7) WEIGHT: 0.38 lbs
 - 8) ALL NON-DIMENSIONED FEATURES DEFINED PER DRAWING FILE "D5134-2-REVA.SLDPRT"
 - 9) POSITION TOOLING HOLES AS REQUIRED WHILE MAINTAINING MINIMUM 2D EDGE DISTANCE AND 4D PITCH BETWEEN HOLES

RELEASED
2014-10-08
mp

APPROVED	DESIGN	AP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
	DRAWN	AP		
	CHECKED	ML	DRAWING NO.	REV. A
	MFG. APPR.	RQ	D5134	SHEET 4 OF 4
	APPROVED	MP	TITLE	SCALE
	DE APPR.	DS	DAMPER SUPPORT ASSY	NTS
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DQA:

Date: 15/07/09



QA Closed:

Date: 15/07/08

WORK ORDER NON-CONFORMANCE / UPDATE

Work Order update only ☐

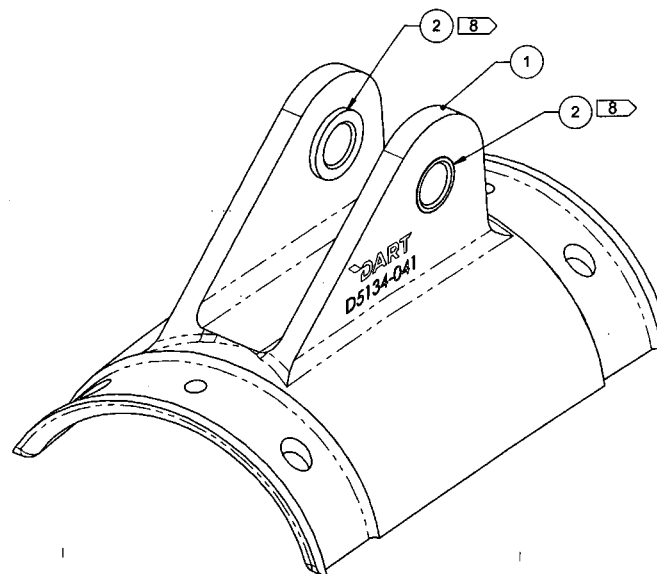
Work Order: <u>13/330</u> Part No. <u>DS134-042</u> NCR No. <u>15-5171</u>	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☒ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☒</td> </tr> <tr> <td>Machining ☒</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☒	Machining ☒	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☒															
Machining ☒	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	15.04.28	110	8	DIM 1.461 IS ACTUALLY 1.471. DRAWING IS WRONG	A.P. 15.04.28	ACCEPTABLE TO USE AS IS. DRAWING WILL BE UPDATED See Rev B drawing.	A.P. 15.04.28	DAS 9 9-89 15-05-29	DAS 9 9-89 15-05-29
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☒ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge	☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
--	--	---	---	--

ITEM	QTY -041	P/N	DESCRIPTION
	X	D5134-041	DAMPER BRACKET ASSY, LH
1	1	D5134-1	DAMPER SUPPORT, LH
2	2	NAS77C6-021	BUSHING



D5134-041 DAMPER SUPPORT ASSY, LH

RELEASED

2015 MAY 12

A.R. ECHIS-SXD

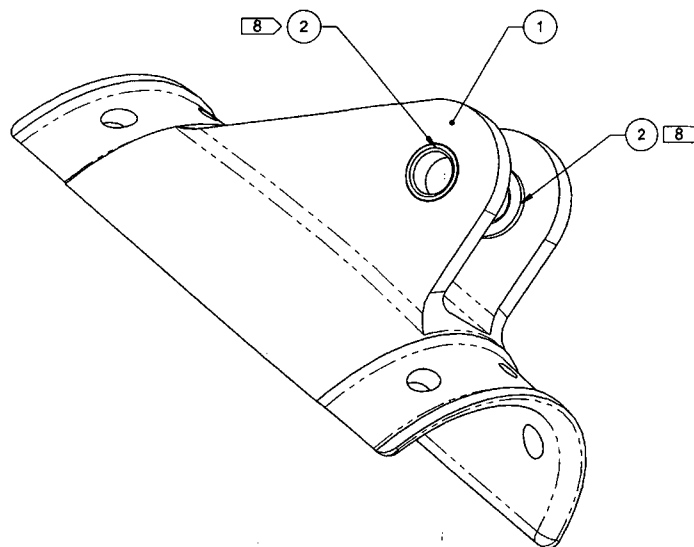
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: PRIME AND PAINT WHITE PER DART QSI 005 4.2
MASK OFF INNER SURFACE OF BUSHING PRIOR TO APPLICATION OF PRIME/PAINT
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.42 lbs
- 8) NAS77C6-021 BUSHINGS ARE PRESS FIT INTO D5134-1 DAMPER SUPPORT, IN ORIENTATION SHOWN

B	7075-T73 MATERIAL WAS 7075-T6, MINOR DIMENSIONAL CHANGES (SHT 3 & 4)	AP	15.04.24
A	NEW ISSUE	AP	14.09.02
REV.	DESCRIPTION	BY	DATE
DESIGN	AP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AP		
CHECKED	CP	DRAWING NO.	REV. B
MFG. APPR.	JLM	D5134	SHEET 1 OF 4
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	DAMPER SUPPORT ASSY	NTS
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APPROVED

ITEM	QTY	P/N	DESCRIPTION
	X	D5134-042	DAMPER SUPPORT ASSY, RH
1	1	D5134-2	DAMPER SUPPORT, RH
2	2	NAS77C6-021	BUSHING



D5134-042 DAMPER SUPPORT ASSY, RH

RELEASED

2015 MAY 12

A.R. ECR15-570

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: PRIME AND PAINT WHITE PER DART QSI 005 4.2
MASK OFF INNER SURFACE OF BUSHING PRIOR TO APPLICATION OF PRIME/PAINT
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.42 lbs
- 8) NAS77C6-021 BUSHINGS ARE PRESS FIT INTO D5134-2 DAMPER SUPPORT, IN ORIENTATION SHOWN

APPROVED

DESIGN	AP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AP		
CHECKED	CP	DRAWING NO.	REV. B
MFG. APPR.	JLM	D5134	SHEET 2 OF 4
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	DAMPER SUPPORT ASSY	NTS
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9 $\varnothing 0.188$ TOOLING HOLE
AS REQUIRED, 2 PL

9 $\varnothing 0.257$ TOOLING HOLE
AS REQUIRED, 4 PL

0.893
REF

0.36
TYP

R0.063
4 PL

DART
D5134-041

GRAIN
DIRECTION

4.671
REF

0.632
REF

$\varnothing 0.500^{+0.000}_{-0.001}$
THRU

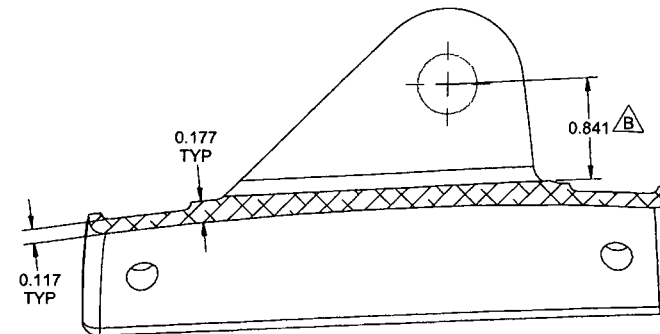
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0.100
2 PL

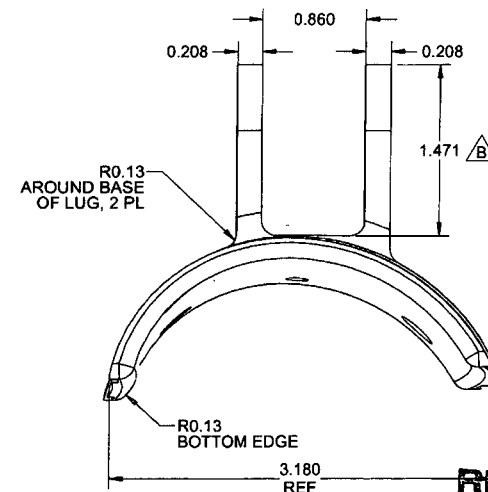
0.728
2 PL

0.36
4 PL

R0.25
THIS EDGE ONLY



SECTION A-A



RELEASED

2015 MAY 12

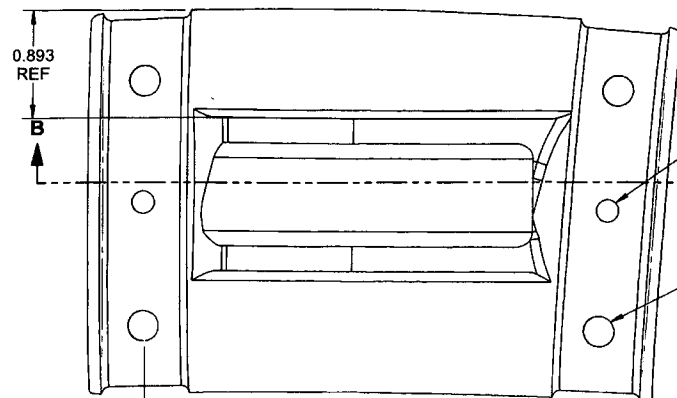
A.R. ECTS-570

NOTES:

- 1) MATERIAL: ALUMINUM 7075-T73 (T7351 / T73510 / T73511) BAR
PER AMS-QQ-A-200/11 OR AMS-QQ-A-225/9 (AMS 4124) OR
AMS-QQ-A-250/12 (AMS 4078), REF DART SPEC M7075T73B
- 2) FINISH: CHEMICAL CONVERSION COAT PER QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART LOGO AND P/N "D5134-041" IN AREA SHOWN
USING 0.125 HIGH X 0.010-0.020 DEEP LETTERING PER DART QSI 044 6.3,
IDENTIFY WITH DART B/N PER DART QSI 044 6.1
- 7) WEIGHT: 0.38 lbs
- 8) ALL NON-DIMENSIONED FEATURES DEFINED PER DRAWING FILE "D5134-1-REV.B.SLDPRT"
- 9) POSITION TOOLING HOLES AS REQUIRED WHILE MAINTAINING MINIMUM 2D EDGE DISTANCE AND 4D PITCH BETWEEN HOLES

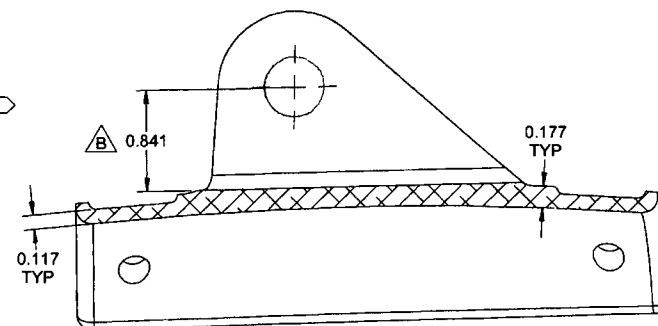
APPROVED

DESIGN	AP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AP		
CHECKED	CP	DRAWING NO.	REV. B
MFG. APPR.	JLM	D5134	SHEET 3 OF 4
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	DAMPER SUPPORT ASSY	NTS
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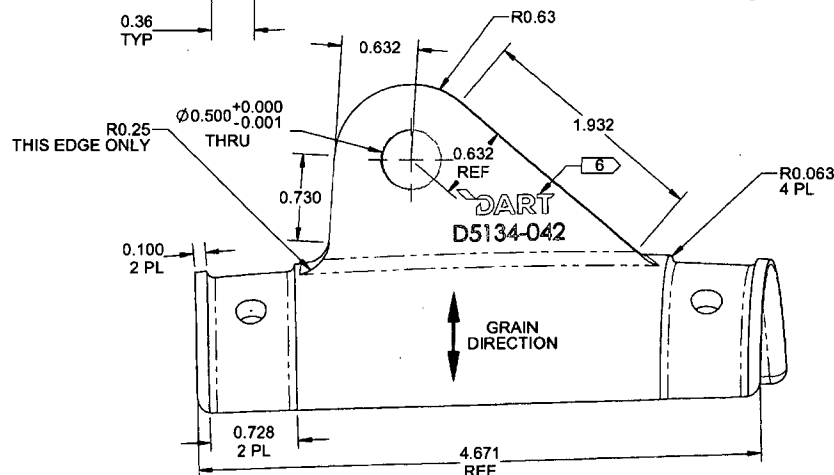


Ø0.188 TOOLING HOLE
AS REQUIRED, 2PL

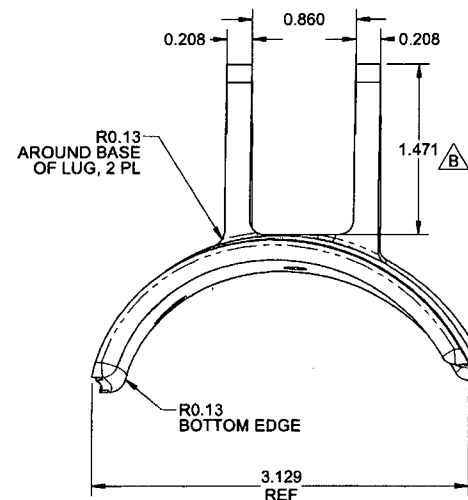
Ø0.257 TOOLING HOLE
AS REQUIRED, 4PL



SECTION B-B



D5134-2 DAMPER SUPPORT, RH



RELEASED

2015 MAY 12
A.R. EXN 15-570

NOTES:

- 1) MATERIAL: ALUMINUM 7075-T73 (T7351 / T73510 / T73511) BAR
PER AMS-QQ-A-200/11 OR AMS-QQ-A-225/9 (AMS 4124) OR
AMS-QQ-A-250/12 (AQMS 4078), REF DART SPEC M7075T73B
- 2) FINISH: CHEMICAL CONVERSION COAT PER QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART LOGO AND P/N "D5134-042" IN AREA SHOWN
USING 0.125 HIGH X 0.010-0.020 DEEP LETTERING PER DART QSI 044 6.3,
IDENTIFY WITH DART B/N PER DART QSI 044 6.1
- 7) WEIGHT: 0.38 lbs
- 8) ALL NON-DIMENSIONED FEATURES DEFINED PER DRAWING FILE "D5134-2-REV.B.SLDPRT"
- 9) POSITION TOOLING HOLES AS REQUIRED WHILE MAINTAINING MINIMUM 2D EDGE DISTANCE AND 4D PITCH BETWEEN HOLES

APPROVED

DESIGN	AP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AP		
CHECKED	CP	DRAWING NO.	REV. B
MFG. APPR.	JLM	D5134	SHEET 4 OF 4
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	DAMPER SUPPORT ASSY	NTS
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